

State of Illinois
DEPARTMENT OF TRANSPORTATION
Bureau of Local Roads and Streets

SPECIAL PROVISION
FOR
BITUMINOUS AGGREGATE MIXTURE BASE COURSE

Effective June 27, 1966
Revised January 1, 2002

All references to Sections or Articles in this specification shall be construed to mean a specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

This item shall consist of a mixture of aggregate and bituminous material, plant mixed and constructed on a prepared surface in accordance with the requirements of Section 355, except as follows:

355.02 Materials. Revise subparagraph (a) of Article 355.02 to read:

"(a) Coarse Aggregate (Note 1) 1004.04 (a, b, & d)"

Revise Note 1 of this Article to read:

"Note 1. The coarse aggregate shall be of gradation CA-10."

Revise Note 2 of this Article to read:

"Note 2. The bituminous materials used in the mixture shall be PG 46-28 or PG 52-28. The Engineer reserves the right to specify the grade that shall be used. The same grade of bituminous material shall be used throughout the work."

Article 355.05 Composition of the Mixture. Delete the second paragraph of Article 355.05.

Revise the third paragraph of this Article to read:

"The Contractor, at his expense, shall submit a sample of 45 kg (100 pounds) of the aggregate to the Engineer that he proposes to use in the bituminous mixture. The sample shall be submitted at least 4 weeks prior to start of base construction. The aggregate sample shall be taken under the supervision of the Engineer.

At the time of submitting the sample, the Contractor shall state the source of the aggregate and the source and grade of the asphalt that will be used.

The sample submitted to the Engineer when mixed with the designated grade of asphalt shall produce a satisfactory bituminous mixture that will have a tensile strength at least 45 kg (100 pounds) greater than the minimum requirements shown on the plans. If the material will not produce a satisfactory mixture meeting this requirement, the Contractor shall submit a material that will comply. The asphalt content shall not vary more than ± 0.5 percent from that set by the Engineer.

If the aggregate furnished for design purposes contains some crushed material, the Contractor shall submit with the sample a statement giving the percentage of plus No. 4 material that is crushed. Throughout the improvement this percentage shall be maintained within a minus 5 percentage points of this amount."

355.06 Preparation. Add the following to Article 355.06:

"A 2 liter (0.5 gallon) sample of the bituminous aggregate mixture for each 1,500 metric tons (tons) produced, shall be taken by the Engineer for extraction tests. A minimum of 3 samples shall be submitted. The samples shall be a composite sample taken from at least five trucks.

A 1 liter (quart) sample of the bituminous materials being used shall be taken by the Engineer at the same time the bituminous aggregate mixture sample is taken. The sample shall be taken from the line leading to the asphalt bucket or pug mill spray bar or directly from the asphalt bucket or spray bar. Asphalt Cement shall be submitted in a 1 liter (quart) friction top can.

355.09 Compaction. Revise the third paragraph of Article 355.09 to read:

"The base course shall be compacted to a density of not less than 90% of the maximum theoretical density. The theoretical density shall be determined by ASTM 2041 or at the option of the Engineer, it may be computed from the saturated surface dry specific gravity of the aggregate and the specific gravity of the asphalt at 25 °C (77 °F)."

355.11 Tolerance in Thickness. Add the following to Article 355.11:

"If a Bituminous Concrete Course is to be placed as part of the same contract, the area of deficient base thickness may be placed during the surfacing operation; however, the quantity so used will be computed by the Engineer and shall not be included for payment."

355.12 Method of Measurement. Revise Article 355.12 to read:

"Bituminous aggregate mixture base course will be measured for payment according to the requirements of Article 353.12. The reference in Article 353.12 to portland cement concrete base course shall be construed to include bituminous aggregate mixture base course."

355.13 Basis of Payment. Revise Article 355.13 to read:

"This work will be paid for at the contract unit price per square meter (square yard) for BITUMINOUS AGGREGATE MIXTURE BASE COURSE of the thickness specified."